#### **ISETR** remarks

Rapid City, SD November 18, 2015

## MP/EIS

1.a Have the Lead Agencies been clear about how the results of the proxy analysis of the bird alternatives were incorporated into the multispecies alternatives moving forward for detailed analysis?

#### MP/EIS 1a How results of proxies used

- Yes
- As far as we can tell have incorporated proxy results in what alternatives get carried forward

## MP/EIS

1b. And, have the Lead Agencies been clear about why the particular management actions included in the multi-species alternatives have been selected for further detailed analysis? If not, what additional information or discussion is needed between the Lead Agencies and MRRIC on this topic?

#### MP/EIS 1b Why particular actions included

- Demonstrated logic
- Search for clearly inferior alternatives
- Pair wise comparison demonstrated a tie between spring 35 and spring 42 and want to include fall 35 for breadth of EIS analysis

#### **Pallids**

- Pallids not included in proxy process
- ISAP commented on science and policy behind pallid framework

## MP/EIS

2. Are the current Human Considerations (HC) Objectives, Metrics, Methods, and Models sufficient to assess the effects on human considerations of the management actions included in the multi-species alternatives moving forward, including for actions outside the "sideboards"? If not, what modifications or additions are needed?

## MP/EIS 2. Are methods and models sufficient outside sideboards?

- Models remain appropriate
- All within Principles and Guidelines standards
- Stakeholders have been invited to reassess whether their concerns are reflected in metrics

1a. Do you have any thoughts to share as the agencies and MRRIC work together to develop specific HC monitoring metrics and the associated decision criteria?

#### AM 1a monitoring metrics

- HC monitoring allows you to adjust magnitude of management action
  - If actual effects more than was predicted then reduce magnitude of action
  - If actual effects were less than predicted then increase magnitude of action
- Compare model results and proxies with actual damages
- If proxy metrics cross thresholds then look at final performance metrics

1b. Is it clear how decision criteria for evaluating HC impacts could be determined?

Too early to tell

2. What kinds of expertise will be needed on the Agency AM Development Team to develop and incorporate HC monitoring metrics and decision criteria into the AM plan?

#### AM 2. Expertise

- Expertise needs to match what needs to be monitored
- Include statistical, socio-economic, accounting big data assessment, ecosystem services capability

3. Given what we have learned so far, is it clear whether MRRIC will have clear and adequate opportunities to participate in the analysis and interpretation of the results of HC metrics monitoring? If not, do you have any suggestions for making it clear?

#### AM 3. MRRIC participation 1 of 2

- Not yet clear
- Propose HC update comparable to what is proposed for science in governance of adaptive management slides
- Potentially feasible to include MRRIC in annual decision process
- MRRIC should participate in planning process to determine decision triggers where timeframe is less than 1 year

## AM 3. MRRIC participation 2 of 2

- Appropriate to include 3<sup>rd</sup> party measurements of metrics
  - Stakeholder monitoring data may be useful
  - Appropriate to validate estimates

## Other thoughts

# Evaluate cost effectiveness of all 3 bird habitat types

- Consider developing necessary data on biological productivity and costs of in-channel, reservoir and off-channel habitats to allow
- Calculating productivity of each \$ spent for equivalent habitat effectiveness
  - COE to utilize its experience conducting cost effectiveness/incremental cost analysis planning tool

#### Conclusions

- Monitoring HC objectives important
- Proxies maybe useful as initial indicators
- \$ metrics can be used to evaluate magnitude of actions along entire river
- Value to adding HC expertise to AM team
- Develop data to conduct cost effectiveness analysis of 3 bird habitat types